PCT/1503/00758 10/501758

METHODS FOR THE PREPARATION OF ALKYL DIARYL BORINATES AND COMPLEXED DIARYLBORONIC ACIDS This application is a 371 of PCT/USO3/00768 filed on 01/09/2003. CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority from U.S. Provisional Application Serial Number 60/347,811, filed January 9, 2002, the disclosure of which is incorporated herein by reference in its entirety.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to methods for preparing alkyl diarylborinates and methods for preparing complexed diarylboronic acids, which are useful as antibacterial agents.

2. Description of the Related Art

N-O complexed diarylboronic acids are known to be effective pharmaceutical agents. For example, such compounds are capable of inhibiting adenine DNA methyltransferases in bacterial cells and thus exhibit antibacterial, growth-inhibitory properties against any bacterial species that produces an adenine DNA methyltransferase. Antibacterial diarylboronic acids are described in International Application Publication No. WO 00/75142.

Currently available methods for the preparation of N-O complexed diarylboronic acids require the use of dichloroborane methyl sulfide complex as a starting material. The use of dichloroborane methyl sulfide complex has several disadvantages, including the formation of dimethyl sulfide (DMS) as a side product of the reaction. Further, dichloroborane methyl sulfide reacts violently with water to produce flammable and harmful gases and has a repugnant odor that causes great discomfort for any lab personnel working with the material.